

THE MURRAY DARLING BASIN PLAN

IT'S OBJECTIVES,OUTCOMES ,IMPACTS AND POSSIBLE SOLUTIONS

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The Murray Darling Basin Plan provides a Coordinated approach to water across the Murray Darling Basin's four states QLD,VIC, NSW ,SA and the ACT. It aims to balance environmental ,social and economic considerations by setting water use limits to an environmentally sustainable level . The Murray Darling Basin drains one seventh of the Australian Continent and represents one third of Australia's Agricultural production .

*The Basin Plan was passed in law Nov 2012

*The MDBP set a new limit on the take of surface water to 10876 GL (Down from 13623GL in 2009) and 3324 GL of Ground water , so a decrease of 2750 GL per year .

*By March 2014 70% of 2014 of the 2750 GL had been recovered through investment in more efficient infrastructure , Environmental measures and Water Purchases (Buy Backs)

*2019 80% of the water has now been recovered .

*The plan will once completed will see 2750 Gegalitres of water removed from Irrigated Agriculture and returned to the River System approximately 1/3rd of the productive pool

*According to MDBA modelling a total of 800 jobs throughout the entire basin would be lost due to the plan

***The construction of the Hume Dam 1936 and the Snowy Mountain Scheme 1949 was to utilise the water for Power and Irrigation . Dartmouth was completed in 1979 to further increase irrigation capacity for the Southern connected system to drive economies of regional centres**

OBJECTIVES

SOCIAL

*Strong and Vibrant Communities with sufficient water of a suitable quality for drinking and Domestic uses (including in times of drought) as well as for cultural and recreational purposes .

ECONOMIC

Productive resilient industries that have long term confidence in their future particularly for food and fibre production.

ENVIRONMENTAL

Healthy and diverse ecosystems with rivers regularly connected to their creeks , billabongs and floodplains .

OUTCOMES

*Only about one third of extractions in the Northern Basin (QLD and Northern NSW)are metered .The plan required a lower level of recovery from the North on the grounds that it wasn't so heavily developed . These loosely controlled extractions are injuring the lower Darling River . The plan assumed floodplain harvesting totalled 207 Gl however the real figure is between 1000gl and 2000gl .

*Floodplain harvesting and light supervision of pumping from the northern Rivers has contributed to the dire straits the Darling River is in now ! Estimated the drought conditions being experienced now have occurred 3 years earlier due to River Mismanagement .

*Important to note that in 2016 the entire system was at 100%capacity never in it's management history has so much water been used so quickly and in a manner that now puts the whole system and regions under stress.

Menindee Lake mismanagement has resulted in the well documented 2018 Fish Kill and has left NSW communities without stock or domestic water .

*The NSW government has invested in a Noah's Ark style approach (Retrieving and redistributing) Fish to stave off a potential fish Armageddon this summer . This action has been described as placing a band aid on a gaping self- inflicted wound .

*Drastic reduction in Rice and fodder production due to dry conditions and 0% water allocation 2018 and 2019 season .

*100 jobs lost at Sun Rice Deniliquin 2018 further 135 in 2019

*The MDBP Impact on the Dairy Industry is devastating .Although the Dairy Industry has had other issues the latest Murray Dairy Figures highlight the impact that changes to water policies have had on the those Dairy Areas that rely on water to run their businesses .The North East region that is not impacted by the MDBP has had little decrease in its milk production since 2001 whilst the Riverina and Goulburn Murray Irrigation District milk volumes have plummeted .

Riverina Milk Volume Year 2012 Vol 208,790,303 litres Year 2022 Vol 123,922,937 litres

GMID Milk Volume Year 2012 Vol 1703,635,833 litres Year 2022 Vol 1373,122,462 litre

*30,000 dairy cows have left the Cohuna Region between June 2018 – June 2019 ,9000 young stock , 55 local farms completely destocked and ceased dairying . Equates to \$120,000,00 loss to the local economy and equivalent of 330 jobs . Important to note this is just Cohuna region . 2023 despite record milk prices another 12 Dairy Farming businesses have exited the industry .

*The current MDBP does not take into consideration the Eco systems that exist on Irrigated Farmland .

There is little or no data on the types and number of species that existed on farmlands prior to the implementation of the Basin plan therefore the outcomes of the plan cannot be accurate . The reduction of irrigation in our region threatens the 100 year old eco systems that have developed

since the introduction of irrigation hence will have a negative impact on the native species that rely on these eco systems to survive . It is at present the Forgotten Environment . Over 2000 kms of channels have been removed , plastic lined or piped under the modernisation project .

*The “Shared Benefits” of Irrigated Farmland needs to be acknowledged. Primary production and Native species co exist . Water used for irrigating farmland does have an Environmental Benefit .

Environmental water that is put on the Market to be used by irrigators still provides an Environmental benefit both for the land it is put on and the money raised can be used for Environmental projects . The just add water approach to address Environmental issues is not working in many cases .

*The MDBP has strayed from it’s origin . On Australia Day 2007 PM John Howard said “The water acquired by efficiency measures or direct purchase can provide greater security for water users in dry years and provide sustainability greater Environmental flows in later years . These Measures will contribute to the changing face of Agriculture in the basin . Water that accrues in the Commonwealth Government through these measures will be managed to restore the health of rivers and wetlands in the MDB . The counter cyclical nature of Environmental watering will also allow for some water to be made available to irrigators during dry periods .

*Federal Government must take responsibility for the third party impacts caused by the natural constraints of the Rivers and creeks. The 2750 figure requires the acquirement of 2000 easements to be delivered.

*Impacts of a plan that has not allowed enough time for businesses to adapt . 28 % of water removed from the productive pool over 9 years is brutal . The collateral damage on communities is extreme .

As per Murray Dairy figures 2019 {This would be higher now due to increased milk prices}An average 200 cow dairy farm generates 1 million dollars Annually at Farmgate , \$780,000.00 of this returns to the local economy and employs the equivalent of 6 fulltime staff . The recent herd sales means \$46 million has disappeared annually from our small community as have 360 jobs. It is important to remember that many of these herds where 400-600 cow herds so the economic and social impact of them ceasing operation is enormous . The claim of local Government that tourism will fill this void is outrageous. There is no bigger economic driver than dairy . It has been heartbreaking to see that our local Government in the Gannawarra shire has sat quietly and allowed the decimation of their Irrigated Agriculture Businesses in return for hush money offered by the State and Federal Governments . Whilst the projects delivered are exciting and do add appeal to the town they will never generate the economic benefits that the dairy and Irrigated Agriculture businesses did .

*It is also important to consider the loss of Skill set . There is now very few Share Farmers, generational succession or Apprentices working on the dairy farms that remain operating . As a nation we are at risk of losing these farming skills as they are not being passed on in the same way they were in the past . Who will feed us when these skills and businesses are lost forever ? The Covid Crisis certainly has highlighted the risk of relying on other countries to provide us with our basic food requirements .

*The Fodder Crisis was unprecedented in 2018/19, could have be assisted by more affordable water {Commonwealth owned Water }being released onto the market . Irrigation was used to drought proof our regions as well as supply fodder for other areas when they experience fodder shortages .

The ability to do this now has been greatly diminished as Irrigation water has become too scarce and too expensive to use to grow fodder .

*1500 cap must remain

*450 upwater must have socio /economic impact neutrality which will make it almost impossible to obtain as any further reduction in the productive pool will be devastating for many

*Transparency of Environmental outcomes of Environmental Watering , accountability for Environmental projects . At present many of them resemble a mad scientist's Experiment . A ground up approach must be adopted if better outcomes are to be expected {Eg like the Pollack Swamp approach }

*The gross under estimation of the social and economic impacts of removing 1/3 rd of the productive pool in a 7 year period with no flexibility to adapt to climatic conditions . One has to question the due diligence of the MDBA and their accountability when Phil Townsend evaluated industry data and concluded that "Milk production was not related to water availability and assumed that dairy farmers had access to other options such as buying in fodder" . He concluded that "The reduction of water had had only a modest effect on milk production "(reference Rob Rendell discussion paper 'It's not all about almonds) This is certainly proving to be a wrong prediction as the figures above show , also important to note that ½of the Nation's milk loss in 2018 came from Northern Victoria . Job losses to date in the two towns of Deniliquin and Cohuna are at 465 hence highlighting the massive under estimation of the MDBA when it claimed only 800 jobs would be lost from the entire basin !

*The Shire of Gannawarra has had a 44.1 % increase in crime since 2014 .

*The plan fails to acknowledge or recognize the Environmental benefits of Irrigated Agriculture . Each irrigation farm is a micro wetland and collectively they form the biggest wetland in Victoria . They each have eco systems that support vast numbers of native species . There is little or no data that is recorded by the MDBA on Native species on Farmland prior to the implementation of the plan or during it's implementation . Facinating really that they could overlook such an enormous part of the environment . Within the NCCMA region 86% of the area is farmland ,yet almost 100% of the monitoring and resources go to the remaining 14% . How can the Environmental impacts of the plan be accurate when it has missed such an huge part of the Environment . As farms cease to operate and dry up the native species they support will also decrease . Primary production and Native species co exist , irrigation water is duel purpose water that has a commonwealth benefit with absolutely no cost to the Common wealth . Surely this Environmental benefit could be recognized in the form of delivery Commonwealth water to irrigation properties during times of drought and via well managed shared projects between land holders and the Environmental Water Holder A sensible use of a commonwealth resource that would support both native species and primary production with out spending billions !!!

On our dairy we farm we support over 80 species of birds with only 5 of them being introduced species . The dams drains and channels provide a water source , the pastures , trees and vegetation provide shelter and a food source , our management of feral animals such as foxes and wild cats ensure their safety . There is vast biodiversity on our working dairy farm !!!

GUNBOWER FOREST MANAGEMENT

The Gunbower Forest is one of the 6 icon sites identified in the Murray Darling Basin Plan . It is now one of the forests that receives Environmental Waterings . These are managed by North Central Catchment Management Authority

*Some of the wetlands in the forest have received environmental water since 2005 .

* In 2014 a regulator was put in at Hipwell rd to enable large portions of the forest to be irrigated .

*There were concerns by many locals that the natural constraints of the Gunbower Creek would make it difficult to deliver the amount of water the authority required for the forest . {1650 mg p/d}The structure was built ignoring these community concerns . The first irrigation of the forest was in 2015 in May as it was recognised that the flows required could not be delivered during the irrigation season instead less than half the modelled volume can actually be delivered .

*Due to creek being unable to deliver the volume of water during the irrigation season (As predicted by locals) Most of the Environmental waterings now have to take place during May to August ,so Autumn and winter . Which is out of season and to date has not mimicked nature with one of the main irrigations of the forest occurring in 2018 a very dry year as a result many of the flooded parts of the forest now appear barren and void of any under story and the Gum trees look very stressed . It is well known fact that Red Gums and box trees that are inundated with water for too long will die . Evidence of this is clear when we look at areas like Kow Swamp and Lake Mulwala they are filled with dead trees due to changes to water management decades ago ! Foresters that work in the forest have noticed many of the trees have blue stain in them an indication that these trees are stressed due to too much water .

*The Gunbower Forest is heavily modified with roads ,levee banks and structures it was very optimistic to think that the irrigation of this space would follow the natural flooding pattern. Instead many areas of the forest have very deep volumes of water covering them for extended periods of time during the coldest parts of the year . If these same practices were done in a farm setting the result would be sterilized ground void of most vegetation .

*Environmental watering demands has resulted in constant high flow occurring in the Gunbower Creek which has resulted in unprecedented erosion of the Gunbower Creek banks especially upstream of the Hipwell Rd Regulator in the locally known Narrows . 89 year old Farmer has never seen anything like the damage that has occurred in the past 5 years in a lifetime of living on this part of the creek . This bank erosion has caused the loss of the nesting environment for the platypus and kingfishers.

*Huge carp breeding events occurred in the flooded regions of the forest then flowed back into the Gunbower creek and Murray River . During the 2022 floods it was Concerned community members that alerted NCCMA that the Fish ladder was opening daily for 12 hours allowing millions of carp that had bred in the forest to enter the creek via the Hipwell regulator , They were of the opinion it was non operational . This highlights the risk of managing Natural resources remotely . As “Farmers of the Forest which is what NCCMA now are they must be on the ground to address the different issues that arise when irrigation or managing structures especially during a Natural Disaster even if it does occur during the Christmas New Year break as last years did .

*Minimal bird breeding events have occurred , Environmental Waterings caused the flooding of many waterbird’s nest in the Little Gunbower Complex after the Natural Flooding and bird breeding event in 2011

* Vegetation reports of the forest show very varied results . Reporting is vague and at times contradictory

*Natural flooding occurred in 2016

*2018 54 Gl of Environmental water was flooded into the Gunbower forest in May to October despite the NCCMA own recommendations (Report Spring Summer wetland vegetation Intervention Monitoring Gunbower forest June 2016 by Fire ,flood and flora) to *Deliver environmental water in early spring rather than late in spring and prioritise environmental water delivery in years predicted to be average or above spring and summer rainfall ,over years predicted to receive below average rainfall) 2018 was always predicted to be dry and water was delivered in Autumn and winter !

*2022 NCCMA irrigated the Gunbower forest from May this was despite the forcast of a La Nina and the Dams being at almost capacity. Locals were concerned about this proposal to water the forest via the the Community Reference Group however this was ignored . The forest being full of water decreased the natural flood buffer for our community . There was enormous pressure put on the residents at the Cohuna Golf links and landowners on the Gunbower Creek due to the failing Little Gunbower Regulator . This was highlighted as an issue during the 2011 floods however no repairs have been done !

The Hipwell Regulator also proved to be an issue during the 2022 flooding event ! The black water from the flooded forest entered the Gunbower Creek via the Regulator’s fish ladder and then water flowed over the road into the creek . This resulted in the fresh in the creek becoming contaminated to the point that it was unsuitable for use for the Town water supply . This has never happened before . There was also fish kills and a local mussel pearl farmer had all his mussels die . He has had Mussels in the creek for over 20 years and has never lost them before despite there being many natural floods in the forest during this time . The structure is obviously built below flood level and not for purpose.

*2023 NCCMA once again E watered the Gunbower forest starting in May . This watering was ordered despite the Dams being at record levels and the community being traumatized from the 2022 flooding event ! As predicted the Forest is now naturally flooding as

Authorities release large quantities of water to create air space in the Dams . This is occurring despite below average rainfall in the Dam Catchment region. This scenario highlights the gross mismanagement of the Storage Dams and the Gunbower Forest . The Dams once provided a tool for flood mitigation this has been compromised due to large volumes of Commonwealth Water being carried over year after year and a reluctance to release it earlier this year when the River would have held it within its channel .Instead our communities are once again on a knife's edge as the River bursts it's banks and threatens communities , farms and businesses.

*Wetlands in the forest have been irrigated since 2005 , many have received 8 environmental waterings and 6 natural floods .Despite this the results in both flora and fauna are poor . One must question the timing of these irrigations and in fact they are necessary at all .

*Peter Gell produced a report for NCCMA in 2018 (Why wasn't this done prior to any infrastructure built ?) He claims that only "Black Swamp extends back to and possibly beyond the boundary of European Settlement

*"The sediment from sequences from Green Swamp and Little Reedy Lagoon appear to extend only as far as the onset of regulation (1940)"

*"The relative short nature of the records suggests that ,during indigenous times, these wetlands were dry so frequently (3-7 times /decade)that no net sediment accumulation occurred "

Since 2005 -2019 many of these wetlands have been watered 8 times and have received 4 natural floods . So they have only been dry in 3 of the past 14 years which if we are looking at the report of Professor Gell is very different to the natural flooding regime of these wetlands pre regulation .

*Spring Wood Coup in 2018 was flooded and local residents were given 2 days notice that wood would not be able to collect wood locally. This put many of our vulnerable residents at risk as it was September and we were experiencing below zero temperatures

*Kangaroo Numbers have exploded ,when the forest is flooded they are forced onto adjoining farm land consuming precious stock feed and cause havoc on the local roads.

*The forest is flooded during the time of year when camping in the forest is most likely . The heat , fire risk and insects make camping in summer in the Gunbower forest less attractive . Autumn and Winter used to be its peak time however many regular visitors and locals now choose to camp elsewhere . Generation's of families have camped annually in the Gunbower Forest for decades these traditions are now stifled by the Environmental flooding of the forest and the increased mosquito population .Many have found other places to camp and will not return to our region !

POSSIBLE SOLUTIONS FOR VICTORIA

*Victoria to withdraw from the MDBP

- *Create a plan that works for all based on real science not politically influenced data
- *Reclassify conveyance losses from Hume to the Lower Lakes as Environmental water (debited to the CEWH) This would immediately restore a % of allocation to both NSW and VIC Irrigators. This equates to about 1000GLs
- *An additional 300GL of dilution flow delivered to SA annually could be returned to the productive pool as it is now not justified as EC levels at Morgan are now between 200-400ec and not the predicted 800ec .
- *Lock Zero to be built at Wellington
- *South East Drains to be redirected into the Coorong
- *Lower Lakes returned to their natural Estuarine State with modified Barrages to manage these .
- *Review of Water Trading Rules

Foreign ownership of water must cease

Review of carryover rules

- *Metering of the Northern Flood plain harvesting .

Dam spills and releases need to be recognized as Environmental Flows and be deducted from the CEWH account as they are the only true environmental flow and really do mimic nature

Introduce a “One Trade only “ water trading rule . This would deter speculators from buying up large parcels of water and manipulating the market as only those who have a physical need for the water will purchase temporary water . It brings it back to being an agricultural tool not a speculators toy!

All water owners should carry the load of financing the infrastructure costs not just land owners as the laws currently stand

*Environmental Benefits of Irrigation Agricultural Farms to be recognized . Commonwealth water could be traded /or allocated to Irrigation Farmers as an allocation to recognize their contribution /stewardship to the Native species that exist on their properties . Flexibility in the use of Commonwealth water is needed to maximize Environmental Benefits . After this is one of the main objective of the Murray Darling Basin Plan . Revenue from traded CEWH water could be used for other Environmental projects .

* Small Scale Environmental projects such as the Pollack Swamp where a collaboration of Private land owners , community and Authorities .

*Greater accountability for outcomes of Environmental Projects

In closing as The Murray Darling Basin Authority you are at the control panel during our regions darkest hour ! To do nothing will result in the complete decimation of The Northern

Victorian Dairy industry and many other Irrigation reliant businesses and their communities and indeed the entire Murray Darling Basin .

Changes need to happen now as we really do not have time to wait !